WITH COMPLIMENTS OF AUTHOR.

THE TREATMENT

OF

SUPPURATIVE DISEASE OF THE UTERINE APPENDAGES.

BY

H. J. BOLDT, M.D.,

New York.

[Reprinted from the AMERICAN JOURNAL OF OBSTETRICS AND DISEASES OF WOMEN AND CHILDREN, Vol. XXII., No. 3, 1889.]

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There has been recently quite a revolution and there is now marked difference of opinion concerning the justifiability of surgical interference in diseases of the uterine adnexa. It is true that very many women have been deprived of their ovaries or tubes without having bee benefited; in fact, not a few feel worse than they did previously. Many a patient, if she presented herself to the same surgeon to-day, would not be subjected to the knife at all, or the operation in some cases would be done differently. As some have gone to extremes in operating, others again are going to extremes in the opposite direction, instead of keeping the medium and selecting the cases for operation with gre ter care.

Diseases of the uterine appendages may be roughly divided into three groups; 1st, those in which an operation is unjustifiable; 2d, where it is wise to watch the patient and keep her under constant treatment to see what benefit may be derived and then decide upon the course to be pursued; 3d, those cases where delay is not only unadvisable but dangerous.

It will be my endeavor here to plead for abdominal surgery, in a certain form of disease of the Fallopian tubes; namely, those cases where the tubes are distended with pus, excluding only exceptional cases to be noticed hereafter. The cause of my appeal will be obvious when the histories of the cases are read. Among my abdominal sections there have been four patients in whom I was compelled to operate after rupture of the pus-distended tube had occurred. One does not know how

soon it may be his lot to meet such a casualty, where there is no time to consider and where immediate action must be taken if human life would be saved.

CASE I.—April 15th, 1887, Theodora K——, æt. 36 years, married sixteen years; had one child fourteen years ago, no miscarriages; labor was instrumental. Menstruation appeared at sixteen years. After confinement the patient had metritis and peritonitis. Her illness dates back to the time of her first confinement: complains of lumbar pains which radiate to the hypogastrium and down the thighs to the knees; much headache, cardiac palpitation, and dyspnea. During the past five years all the pains have increased and she has had a number or attacks of local peritonitis. Five years ago she was infected with syphilis by her husband, and is still suffering from the secondary effects. The increase of the pains corresponds to the time of the venereal infection. Bowels are regular; micturition is frequent; menstruation is regular every four weeks, lasting four days with great loss of blood. Severe pains begin three to four days prior to menstruation, gradually ceasing at the establishment of the flow. There is moderate leucorrhea after menstruation.

Examination reveals a hard and indurated cervix, tender to touch; the uterus slightly enlarged and sensitive, mobile, normal position; both tubes and ovaries *much* enlarged and prolapsed; they and the immediately surrounding structures are very sensitive. A diagnosis of double salpingo-oöphoritis syphilitica with endometritis was made and operation advised, provided improvement did not show itself from treatment in the course of a few months.

On May 15th, the patient underwent some violent physical exertion, and several hours later sent for me. She then complained of much more pain than usual in the hypogastric and iliac regions; it was evident that she had a fresh attack of pelvic peritonitis. On May 20th was summoned again to patient who was suffering intense pain, and found her then with a general peritonitis. On examination per vaginam, the tubes which could be distinctly mapped out previously, had lost their contour, there being instead a general fulness on either side of the uterus. There was excessive tenderness on examination. The case was apparently quite plain, the tubes which were distended with pus had ruptured, causing general septic peritonitis. The patient was immediately removed to the hospital. Unfortunately, I did not make up my mind to operate until the following afternoon, after consultation with another colleague who concurred both in the diagnosis and the course to be pursued. At 9 P.M. I opened the abdomen, a large quantity of pus flowing out through the incision. The diagnosis was correct, both Fallopian tubes had ruptured. The abdomen was washed out as thoroughly as the matted intestines would allow, and a Sims drainage-tube placed behind the uterus; during the first thirty-six hours, the patient

did fairly well, so that hopes were entertained for her recovery; after that, however, she began to sink, and died in collapse sixty hours after operation.

Case II.—Katie L——, æt. 29 years; single; never pregnant; seen in consultation on the evening of May 25th, 1887. Patient had scarlet fever when thirteen years old, and gave the history common to cases of catarrhal salpingitis. On April 21st she was suddenly seized with severe pain in the lower part of the abdomen, which gradually increased in intensity for some time; then again she got along seemingly well for several days. On May 23d she again became worse and developed high temperature, which the attending colleague informed me had ranged up to 104° F. in the axilla. Peritonitis was general and the emaciation of the patient very marked. The seat of the most intense pain was to the right of the uterus. Examination showed a fulness to the right of the womb, in which slight fluctuation was appreciable; the left side of the uterus seemed free. A more careful examination could not be made on account of the existing peritonitis and the pain which was caused by the examination. So much, however, was evident, that there was a peritonitis present which was of septic origin; the patient having had chills at variable intervals, and from the salpingitic history and the findings on examination, I considered it due to a ruptured right pyosalpinx.

The patient was removed to the hospital on the following day, where I made an abdominal section which corroborated the diagnosis. The abdominal cavity was cleansed of pus with large quantities of plain warm water. The adhesions were extensive and firm, and the hemorrhage from the points of separation profuse. The patient's condition was poor, so that much time could not be lost, and it was evident that a drainage tube could not be used with such profuse oozing going on. For these reasons I adopted tamponnement of the pelvis with iodoform gauze. The peritoneum was separately closed, as in nearly all of my cases of abdominal section, except at the lower angle where the drain is left to protrude when such is used. At the space where the tube or gauze drain is placed, a long loose suture is passed through the entire abdominal parietes including the peritoneum; this may be of any material at the choice of the operator, so long as it is rendered aseptic. At the Woman's Hospital, where the suture in the tube track was first introduced by Dr. James B. Hunter, it is of silver wire. Both silver and silk have been used by me and I can find no difference in the results, both answering their intended purpose equally well; this purpose being, to close the peritoneum and abdominal opening immediately after the removal of the tube, so that should any suppuration occur in the walls of the abdomen, its products will be prevented from entering the abdominal cavity, the peritoneal edges uniting within a few hours after being brought together.

The patient rallied remarkably well after the operation. The

iodoform gauze acted admirably as a drain and as a hemostatic. Thirty-six hours later it was removed, and a hard-rubber double current drainage-tube inserted in its place, the abdominal cavity being washed out through this. There was absolutely no odor and the first part of the water used in the irrigation was somewhat tinged with blood. The pulse some hours afterwards became very feeble. The foot of the bed was then raised, and the abdominal cavity irrigated with a one-per-cent chloride of sodium solution, about three ounces of the solution being left intra abdominam; after this the patient's condition improved.

On the beginning of the third day, the washings began to be odorous, although the temperature did not rise, and from this time on the irrigation was continued without intermission. The disagreeable odor increased, and the patient rapidly sank from the fourth day, dying on the fifth. The autopsy made about two hours after death showed diffuse nephritis to be the only pathological lesion of consequence. There was decided diminution of the peritonitis, the pelvis was perfectly clean, and there was *no* emission of any putrefractive smell, making the cause of the foul odor of the washings unexplainable to me.

I here take the opportunity to correct an error appearing in the Transactions of the New York Pathological Society, meeting of June 22d, 1887,[1] regarding Cases I. and II., where it is stated: "In the first two cases operated upon by me, peritonitis developed and killed the patients." It should have been: "Septic peritonitis *had developed prior to operation;* these patients died."

CASE III.—Rose E——, æt. 23 years; married eighteen months; one child six months ago; the labor was tedious and child still-born. Her illness dates from the time of her confinement, she complaining of constant intense pain in the right ovarian region, also hypogastric pains accompanied by an intense burning sensation; constant thirst, loss of appetite, nausea and occasional vomiting, constipation, and dysuria.

Menstruation is painful, irregular, too frequent, and lasts eight days with loss of a large amount of blood. There is constant and profuse leucorrhea.

Both tubes are felt prolapsed and enlarged; the ovary on the right side can be distinguished, and seems to be about the size of an English walnut. The uterus is normal in position and is very sensitive, there is present also a bilateral laceration of the cervix. Diagnosis—double pyo-salpingitis due to puerperal endometritis.

During the forenoon of June 12th, I was asked to see the patient as soon as possible. On arrival, I found her suffering with very severe abdominal pains, which had started in the right ovarian

[1] See Medical Record, August 20th, 1887.

region, and had commenced suddenly in the early part of the morning during sexual intercourse; some vomiting was present, and also evidence of slight shock. There was marked tenderness over the entire abdomen, but no evidence of intense general peritonitis. On vaginal examination, I found that the previously enlarged tube on the right side had now disappeared. A large hypodermic of morphia and two ounces of brandy were given, and preparations made for immediate operation. Within two hours I opened the abdomen, when the diagnosis of rupture of the tube was proved to be correct. There was an opening two centimetres in length through which the pus had escaped; this tube and the one on the opposite side, which was also filled with pus, were loosened from the adhesions which were not firm and apparently of recent date and removed. Peritonitis had already begun, yet after thoroughly cleansing the abdominal cavity, I *closed* the wound *without drainage.* The patient made an uninterrupted recovery. The temperature, which had at the time when I first saw her reached 104.3° F. in the axilla, rose to 105° by evening, but then commenced to fall and did not again exceed 100°. From the third day it remained normal.

Case IV.—Helen S——. Had one miscarriage several months ago, produced, she thinks, by heavy work. Since the miscarriage the patient has complained of inguinal pains, most severe on the left side, and severe backache. Menstruation is irregular, about once in five or six weeks, and lasts two to three days with a moderate loss of blood in clots. The dysmenorrhea is very severe, compelling her to go to bed several days prior to flow. In the cul-de-sac of Douglas and to the sides of the uterus large sausage-shaped masses are felt, giving to the examining finger the sensation of a small rubber ice-bag distended to its utmost capacity with water; they are considered to be the Fallopian tubes dilated to fully five times their normal size. The uterus is anterior; the cervix lacerated on the left side; the uterus and its annexæ are very tender to touch. Diagnosis: bilateral puerperal pyo-salpingitis. Immediate removal advised. July 27th, 1887, patient about three hours prior to my visit was attacked with severe abdominal pains, which had commenced quite suddenly, starting in the left ovarian region and radiating over the whole abdomen; she had a small pulse, and was covered with a cold, clammy sweat; temperature 103.4° F. An examination was very unsatisfactory on account of the intense pain it caused; the abdomen at this time already gave a tympanitic percussion sound. Diagnosis was not certain, yet knowing the previous condition and adding the status præsens, I considered myself justified in strongly suspecting the rupture of one or both Fallopian tubes and also in advising quick operative interference. Abdominal section about four hours later proved that the suspicion was well founded. The left tube, which was ruptured, and the opposite, which also accidentally ruptured during removal, were tied off. Adhesions were neither extensive nor firm. The abdomen was

thoroughly washed out, and the wound *closed*. *No drainage*, although the peritonitis had already made considerable progress. Recovery uninterrupted, the temperature at no time rising above 101° F. in the axilla.

In reviewing the cases just quoted, I can only regret that in No. I. I hesitated too long before operation. I felt almost sure of the existing condition from the beginning, consequently I should not have waited an hour, but operated in her own rooms without removal to the hospital; or, better yet, after having diagnosed that suppurative disease of the uterine adnexa existed, an operation should have been urged and done on May 15th, when it was evident that the tubal disease was active, without risking the chances of such a calamity as rupture of the pus-distended tubes. We know the significance of such a mishap, there not being a single case on record, to my knowledge, where a patient has recovered without operative interference. Twice within the past two years I have seen cases on the post-mortem table, dead of purulent peritonitis, which could, to the satisfaction of bystanders, be traced to a ruptured pyo-salpinx. Allow me to digress and quote two other examples which quite recently came under my observation and which impressed me strongly.

CASE IV.—Catherine K—— came to my clinic in March of this year, and without here going into the minutiæ of the status found on examination, I will only say that a diagnosis of a double pyo-salpingitis of puerperal origin was made, she having been confined five months previously, and from that time complaining of hypogastric and inguinal pains, etc. I advised opening of the abdomen and removal of the appendages. Another physician, whom she consulted subsequently to my advice, ridiculed the idea of resorting to the knife, calling it a rash and absurd procedure, assuring the patient that she would get entirely well without an operation. On June 30th I was, however, requested to see this patient at her home, and found her suffering with general peritonitis, which I suspected to be the result of a ruptured tube, her severe illness having commenced suddenly with intense pain in the lower part of the abdomen and, as the husband said, "a fainting spell." An immediate operation was declined, and the patient died on July 2d. On opening the abdomen, the evidences of a general purulent peritonitis were at once seen. Thick, offensive pus welled up from the pelvis on lifting away the lymph and pus-covered highly inflamed intestines. The left Fallopian tube was greatly distended with pus, and slightly adherent; the ovary enlarged and containing small abscess-cavities. The right Fallopian tube was ruptured and

nearly collapsed, the adhesions extensive; ovary in the same condition as on the opposite side. Uterus slightly enlarged; other organs normal.

Case V.—The second, Elizabeth N., aged 23, mother of two children. On Oct. 19th I saw the patient the first time professionally. The history was that she recently had an abortion, and since that time suffered from pains in the inguinal regions and severe pressing pains in the rectum, especially on defecation. Examination showed both tubes distended, the left was prolapsed and pressed on the rectum. Very careful massage was used according to the method of Thure Brandt—my teacher in gynecological massage, on which the patient rapidly improved from the moment of its adoption; yet having had an extended experience with this class of cases, I felt very uneasy as to the continuance of my treatment, it being contrary to that which I had formerly pursued in such cases, and an experienced colleague was requested to see her with me in consultation on October 24th. He advised rest and awaiting of results, especially as she was feeling so well at the time. This plan was adopted. As to diagnosis, there was no difference of opinion. The following day, however, the patient, without any apparent cause, had a severe chill, which was followed by an axillary temperature of 104.4° F., and she rapidly developed a general peritonitis, from which she improved so that by October 29th she felt perfectly well, and the ice coil was left off. Despite her apparent excellent condition, my prognosis was guarded. My reason for being so very apprehensive as to the final result was, that, although the usual exit for the pus, if rupture occur, is by the way of the bladder or rectum, adhesions having been formed, my previous experience had shown me very clearly that a more unfortunate termination might ensue. On the evening of October 29th the patient experienced a sudden sharp pain in the left ovarian region, which radiated over the entire abdomen. When I saw her three-quarters of an hour later she was screaming with pain; temperature 103.4° F., pulse 120. Cyanotic countenance. Examination showed that the left tube had collapsed. Diagnosis of ruptured pyo salpinx was made, patient given ℥ xl. of Magendie's solution, and everything made ready for immediate operation. A prominent colleague in this branch was asked to give his aid. By the time my assistant had got my instruments to the house of the patient her temperature was 105° in the axilla, which it was also on my colleague's arrival; pulse 134, feeble. In a very short time, however, the temperature began to fall rapidly, and soon reached 101.5°. The pulse was then 112, and fairly strong. Under these circumstances, the patient feeling very comfortable, it was but natural to think that possibly I had erred in my diagnosis, and my confrère's explanation that she had an acute attack of peritonitis, which was bettered by the large dose of morphine given her, seemed very plausible. We therefore concluded to defer our midnight operation and wait until morning. Alas! she soon sank so that by 4 A.M. the

pulse was 140 and very feeble; operation was out of question; stimulation did not improve the condition; the intended interference could not be thought of with the slightest chance of recovery from the shock of operation and narcosis. Death occurred thirty-six hours after the first appearance of the symptoms. The autopsy showed rupture of the left tube, and the tubal trouble was shown to arise from a small piece of adherent placenta.

A remark may not be out of place here with regard to cases occurring in private practice, especially among our better class of patients, namely: that in such cases there is altogether too much hesitancy on our part to interfere with the knife. It is very true that many cases of acute salpingitis recover without operative interference; but even if they do get over the acute attack, what is the condition of such patients in the future? Do not the majority remain invalids from pelvic disease?

It cannot be too strongly urged that we open the abdomen in every case of *active* pyo-salpingitis, from whatever cause it may arise, except under positive contra-indications, to be noticed below, or when the tubal trouble is complicated with another disease which in itself will destroy life in a *short* time, as advanced phthisis, carcinoma, etc. The question arises: Can we *always* make the diagnosis of pyo-salpingitis? This, of course, must be answered negatively; yet from personal observation, often corroborated by subsequent operation, I say that it can be done in most cases, and I think that a careful observer, experienced in this line of work, will not often fail. The conditions which we must differentiate are usually hydro- and hemato-salpinx; if, however, the tube or tubes are much distended, ovarian and parovarian cysts must also be considered. The history of the case is of the greatest importance in the differential diagnosis. There are many operators who consider it unjustifiable to operate for hydro- and hemato-salpinx, yet as it is unfortunately impossible for one to always make the positive diagnosis before operation, I still adhere to the opinion expressed in a paper read three or four years ago before the physicians of the German Poliklinik, where I held that even cases of hydro-salpinx should be operated upon if they give rise to serious morbid symptoms which cannot be alleviated by other treatment, because even the simplest and most inert fluid may become purulent after any inflammatory condition set up in the walls of the tube, or from the extension of an endometritis.

I desire to lay particular stress on the fact that, when we

have reason to suspect suppurating disease in activity, without evidence of free communication between such diseased tube and the uterus, the abdomen ought to be opened; even though our diagnosis prove erroneous, not much harm is done to the patient, except that she is deprived of her liberty for a period of three to four weeks, to allow comparatively firm healing of the abdominal wound; besides this there is only the restriction of diet for from ten to fourteen days. The danger of an exploratory incision by a careful and experienced surgeon is almost nothing. If our diagnosis is correct, as it should usually be, what immense advantages are gained by the patient: in the first place, it rids her of the pains which in the majority of cases accompany this condition (pyo-salpingitis), although one must not look for the cessation of the old pains immediately after operation; sometimes a number of months or even one or two years may pass before the full benefit is felt—changing her from an invalid to a healthy being. Secondly, the danger from rupture of the diseased tube is removed—an accident almost necessarily fatal, unless with immediate operation, the risks of which are far greater at that time than if done earlier. In fact, if done prior to such accident, the danger is very slight. Although a prominent German operator's mortality from salpingo-oöphorectomies is very great (over twelve per cent), we must bear in mind that his cases were extremely unfavorable, having waited very long before determining on operation. It is against this too long waiting that I would protest. Why let a patient suffer when we have from history, examination, and observation satisfied ourselves almost with positiveness that she is suffering from a disease not amenable to ordinary treatment? I call to mind a patient who was referred to me, and whom an esteemed colleague examined for me, because another very prominent gynecologist had advised the patient against operation. The poor woman was such a great sufferer that I declined any further attempt at ordinary treatment; the gentleman who had referred her to me, several other physicians, and myself having tried it for some time without obtaining the slightest benefit. I operated, and proved the justifiability and correctness of our diagnosis—pyo-salpingitis dating from abortion. The patient is now fully restored, a picture of health.

When we have opened the abdomen for a suspected pyo-salpingitis, and find that such is not present, but that we have an

hydro- or hemato-salpinx to deal with, shall we close the wound, leaving the tubes intra-abdominal in this condition in which we find them, because some say that it is wrong to do a laparatomy for such disease? I say *no* most emphatically, provided I satisfied myself that the tube in question is at some point *firmly* occluded as the result of adhesive inflammation. No matter what the contained fluid may be, the tube ought to be unhesitatingly removed, for it is certainly of no further use to the patient, and only jeopardizes her health, if not her life. By what right should we allow such appendages to remain? On the ground and with the belief that the blood or serum, whichever the tube may contain, will be absorbed, which may be possible; but does that restore the patency of the occluded tube? Or, if we aspirate the fluid from the tube, may it not refill? If we leave it alone, we run the risks previously mentioned in such conditions; these chances must all be taken. No one will venture to say that such an organ, once firmly occluded from the results of adhesive inflammation, can ever again become permeable; compare the old pleuritic adhesions which are found daily in autopsies—can such pleuræ, after having become firmly adherent to the chest-walls, detach themselves? The condition of an occluded Fallopian tube is pathologically similar.

The question will now naturally be asked, How may we recognize whether a tube is so firmly occluded as to require removal, and when can we with probable safety for the patient leave it undisturbed? The answer is quite simple; the appendage is taken in the left hand, and with the thumb and forefinger of the right hand it is gently manipulated or stroked towards the uterine opening of the tube, care being taken not to handle too roughly lest it rupture; whether the contained fluid be diminished or not will decide the permeability of the tube, and also the further procedure.

I have on my record but two instances in which I regret that I interfered, both occurring in the beginning of my work of abdominal surgery. The first was a case of catarrhal salpingitis with frequent occurrences of local peritonitis. The adhesions in this case were very extensive, and had it not been for the kind assistance of two experienced abdominal surgeons, who were also good enough to examine the patient previously and then advised operation, I should doubtless have abstained from

completing the operation. This patient died of general peritonitis on the sixth day. In the second case, the same condition called for operation, with equally extensive and dense adhesions, the patient dying on the third day from septic peritonitis. With my present views, I think it very doubtful that I would be induced to remove the appendages at all in such cases, especially if the patients were near the menopause.

From Case No. II. several important things may be learned, and experience corroborated. First, I take it for granted that she had an ordinary catarrhal salpingitis which about the time of her severe illness became changed into pyo-salpingitis. She having been ill for such a long period previous to her attack of general peritonitis, she was, of course, not in a good condition to stand an operation of the nature required, yet there certainly was no other chance to save life, as the subsequent findings proved. The patient was in this condition removed to the hospital, a distance of four miles from her residence. Admitting that home care for the poor and those of very limited means can in no way be compared to hospital nursing, I should not again submit a patient suffering from general peritonitis to such exertion, but take my chances of watching such case at home. The patient's condition being very low it was of paramount importance to operate as quickly, and with as little loss of blood as possible. The hemorrhage being very profuse from numerous points and the tissues fairly rotten, if such term can be applied to tissue upon which it is impossible to apply a ligature or an hemostatic forceps successfully, iodoform gauze packing was most successfully used, restraining the hemorrhage, and acting nicely as a drain. The pelvic cavity was perfectly inodorous and dry on its removal. Since then I have several times had occasion to observe the value of gauze packing in profuse intra-abdominal hemorrhage, in which any other allowable means known to me would have been a positive failure. The improvement of the pulse when the abdominal cavity was irrigated with hot saline solution, with the absorption of the fluid left in the abdomen, is another point worthy of notice. We come now to that part of the after-treatment which is to me of the greatest interest and value, for upon this depended, I think, the failure in this particular case. The peritoneal cavity, after removal of the gauze tampon, was dry and emitted no odor; then *properly* the "drain track suture" should have been drawn up and the rest

of the wound closed, and the second introduction of a drain should not have been practised. I feel almost confident that my patient would have recovered from the operation had this course been pursued. Experience gained in similar instances shows my view to be correct; in fact, the less we use drainage the better, excepting only very unusual cases. In Cases III. and IV., there was no *general* peritonitis present, the operation having been done before it had time to develop, as it should be always where a case can be seen early enough; yet free pus was in the abdominal cavity. Still, had these last two cases been in the hospital, where the opportunity of good nursing could have been had, I should, after the pus had been thoroughly cleaned out, and the wound was closed, certainly have drained for fear of septic peritonitis; because it is customary to do so generally, and operators commend it as necessary, especially in England and in this country. However, with the surroundings of these two cases, I decided that it would be disasrous to leave in a drainage tube, and for this reason the course adopted was decided upon. The subsequent progress of the patients showed its correctness. I certainly could not have done better with a drain, but very probably much worse. In urging early operative interference in pyo-salpingitis, I would not be understood as advocating immediate removal of the appendages when the uterine extremity of the tube is patent and the pus can be squeezed out of the tube into the uterus, making its exit into the vagina; this must, however, be amply proven to the attendant, and the tube must be perceptibly smaller after such procedure. In such cases it is not only justifiable, but commendable to use other modes of treatment, as complete rest with careful tamponnement and *proper massage*. Candidly, I do not believe in the frequent occurrence of such cases, although one of our New York abdominal surgeons has said that he frequently sees them. Thure Brandt, of Stockholm, whose method I had the pleasure to study during the past summer, tells me that he considers it the rule to *cure* such cases by his method of massage. Unquestionably they do occasionally occur. In my experience, however, of a very large number of cases, I have but *very rarely* been able to demonstrate such a condition to my own satisfaction.

Another condition of pyo-salpinx in which one should wait is, when the distended tube causes but very slight or no symp-

toms, provided the distention be not great; that is, when the tube does not appear larger to the palpating finger than the average thumb. It is possible, as has been found in a number of times at autopsies, that pus, here as in other parts of the body, may become inspissated, undergo cheesy degeneration, and remain entirely inert. Particular stress, however, should be laid on the absence of these two conditions, and then we will find that such cases will rarely come under the observation of the physician; for why should a patient consult a physician when she complains of nothing? Surely, it is no pleasure for women, as a rule, to be examined per vaginam, and unless she does complain of symptoms referable to the generative tract, a physician will but rarely propose a vaginal examination.

I would not advocate aspirating distended tubes through the vagina, although it has been done successfully, unless I felt sure that adhesions existed sufficiently dense to prevent the escape of pus into the peritoneum after withdrawal of the needle.

When a tube is *greatly* distended, strange to say, it occasionally gives rise to no symptoms except fever and emaciation of the patient, and such cases, when they do occur, in my experience, only take place after the puerperium (a puerperal pyo-salpingitis).

Only a few weeks ago, a case of such description known to me died of the disease, the confinement having occurred several months ago. Such tubes containing a very large quantity of pus ought always to be unhesitatingly operated upon. It is also in these cases that a diagnosis cannot always be made until the operation is undertaken, because the tubes are sometimes so distended as to give rise to the impression that the tumor felt is of ovarian origin, or if adhesions are perceptibly felt to exist, one may think it an ordinary pelvic abscess. To guide us towards a correct diagnosis, the history of the case must always be taken in consideration, in connection with the results obtained by physical examination.

I hope that it will not be understood that I urge the removal of tubes and ovaries except in cases of real necessity. No one can be more against the indiscriminate removal of the appendages than I, who feel inclined to try every safe means in my power to prevent what is in one sense a degradation, from the results of which a number of women are now in the wards of insane asylums. Massage, if employed with the care prac-

tised by Brandt, is an excellent means to diagnose the patency of the tubes before operation, and should a communication exist between the tube and uterus, is an excellent adjunct, and should not be underestimated; it is, however, a very dangerous remedy in the hands of an inexperienced manipulator for the form of disease now under consideration. Whether or not it is capable of producing a cure, future investigation must decide.